Week 4 - Package 1 - Kindergarten Mathematics - Numeral card caterpillar

Things you need

Have these things available so your child can complete these tasks.

Ideal

- 2 sets of numeral cards from 0 - 12 (you can make your own by writing 0-12 on paper squares)
- a length of string

Back up

- A deck of playing cards using A-10, Jack = 11 and Queen = 12.

Why is this activity important?

This task provides opportunities for students to become increasingly confident in using what they know to order numbers.

Before you start

Read the section about follow-up questions.

What your child needs to know and do

This task is easily adaptable and your child can bring to it whatever they know about numbers and counting.

What to do next

Set up our length of string each.

How to play:

- Use two sets of numeral cards (0-12 or beyond).
- Shuffle the cards and place them in one central pile.
- Take turns to turn over one card and place it in front of you, somewhere along the length of string.
- The goal is to be the first person to complete the number sequence from 0 -12.
- If you are unable to place the card on your line, either miss a turn or give the card to your partner (you can choose which rule to use)

Options for your child

Activity too hard?

Change the number range from 0 -6 or 0 to 10, for example.

Activity too easy?

Change the number range from 0 -22, for example.

Follow-up questions to ask your child

- Talk out aloud as you place your cards, drawing attention to important relationships like ‘about half way’, ‘the number before/after’, ‘1 more/1 less’, in between’, etc.
    - “I wonder where I should put my card (for example, 5)? I think it will be a little bit less than half way because i know that 6 is half of 12, and 5 is 1 less than 6.”
    - I think 5 (for example) goes between 3 and 7 because when I count, I say the words 3, 4, 5, 6, 7, ...so I know this is 3, and I know this is 7, 5 is the middle.
- Ask your child to share their thinking about their card placement (and give them a lot of time to think)

Extension/additional activity

Have some numeral cards from the sequence missing and ask your child to identify the numbers that fit within those places, justifying their responses by using words such as “the number before”, “the number after”, “the number between”

Week 4 - Package 2 - Kindergarten Mathematics - Scavenger hunt

Things you need

Have these things available so your child can complete the tasks.

Ideal

- Scavenger hunt sheet
- A pencil
- Some paper

Back up

- Copy the scavenger hunt sheet onto a piece of paper

Why is this activity important?

This game helps us practise identifying numerals to 20, counting, identifying shapes and objects and comparing things.

Before you start

Make sure you have the required resources ready.

What your child needs to know and do

This task is easily adaptable and your child can bring to it whatever they know about numbers and counting.

What to do next

- Have your grid ready.
- Search your house for items on the list.
- Draw what you found in each box.
- Find everything on your list.
- Have fun!

Options for your child

Activity too hard?

Talk with them and help them find things.

Activity too easy?

Change the items in the scavenger hunt.

Follow-up questions to ask your child

- I wonder if…
- Let’s check that by….
- Can you share with me what you were thinking?

Extension/additional activity

Create your own scavenger hunt board for someone else in your family.

Activity sheet 1: scavenger hunt

Your task:

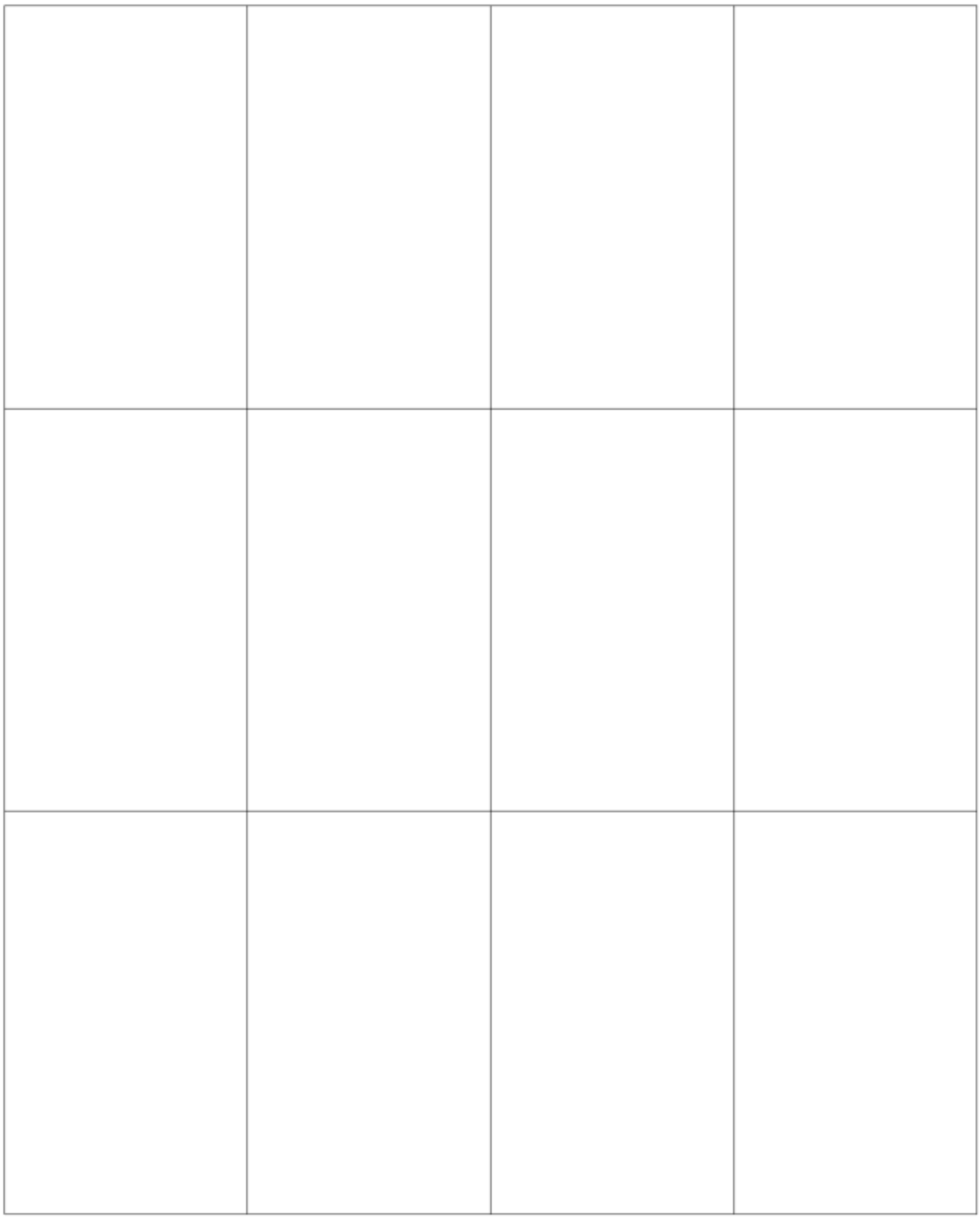
- ❏ Search your house for items on the list.
- ❏ Draw what you found in each box.
- ❏ Find everything on your list.
- ❏ Have fun!

Find 3 squares 	Something shorter than you	Something smaller than your hand	The number 11
Something bigger than your foot	Less than 3 of something	2 circles 	The number that comes before 6
A pattern that has a repeating core like this one… 	1 ten and 2 more objects	The number that comes before 10	Something heavier than your toothbrush

Activity sheet 2: scavenger hunt

Your task:

- ❏ Create your own board.



Week 4 - Package 3 - Kindergarten Mathematics - Matching numbers for two (NRICH maths)

Things you need

Have these things available so your child can complete the tasks.

Ideal

- NRICH maths interactive

Back up

- Print these cards from NRICH maths

Why is this activity important?

This task helps children see numbers in different ways. This is an important aspect of early number sense.

Before you start

This task was developed by NRICH maths. You need internet access.

What your child needs to know and do

This task is easily adaptable and your child can bring to it whatever they know about numbers and counting.

What to do next

Instructions

- Go to NRICH maths interactive
- Take turns to turn 2 cards over at a time, looking for matching quantities.

Options for your child

Activity too hard?

Print out the cards so your child can look at the card for longer.

Activity too easy?

Create your own set of cards

Follow-up questions to ask your child

- What do you notice?
- What do you think this card might be representing?

Extension/additional activity

Choose a task from the ABC TV education program student booklet.

Week 4 - Package 4 - Kindergarten Mathematics - Fill it up

Things you need

Have these things available so your child can complete the tasks.

Ideal

- A variety of containers
- water, damp sand or blocks
- cups or spoons

Why are these activities important?

This task gives your child an opportunity to explore volume and capacity.

Before you start

Make sure you have the required resources ready. You might like to work outside if you're using water or sand.

What your child needs to know and do

Your child might need some help with filling containers and measuring how much water or sand (if you use these) a container takes. They might also need some support in measuring things accurately.

What to do next

- Collect some containers.
- Choose something to fill your containers with such as water, damp sand, or blocks (for example)
    - select just one material.
- Predict which containers will hold the most and order them from most to least.

- Pack/fill the containers to determine which can fit the most.
- Discuss the results
    - if you used blocks, talk about how the blocks can be packed without leaving any gaps
    - Model how to pour and fill the containers, emphasising the use of only one kind of material.

Follow-up questions to ask your child

- Use the terms such as pack, pour, fill, full and empty, nearly full, etc.
- Wonder about noticing when a container is full or not full yet, and make comparisons between containers.
    - Tell me about…
    - Do you need another spoon/cup/pot…?
    - Is there anything else you can think of that we could use here to help us? Why would it be useful?

Extension/additional activity

Make a smoothie together!

Ingredients: 1 cup of milk (or non-dairy milk alternative), 1 cup of coconut juice (or another cup of milk), 1 tablespoon of honey (or alternative), 1 cup of frozen berries (or alternative).

Method: Put the ingredients into the blender. Have the adult plug the blender in and turn it on for one minute, at high speed. Stop the blender and unplug it from the wall. Pour the smoothie into individual cups, sharing equally.

As you're making the smoothie, talk about the mathematics that is surrounding you. For example:

- Ask your child to count how many berries are in 1 cup
- Count them backwards into the blender (when it is off and not plugged in)
- Put a few strawberries in front of the child and ask them to count the pieces one by one before putting them in a measuring cup.
- Count to 1 minute together by counting the 60 seconds
- See how many star jumps each person can do in 1 minutes (or a different physical challenge)
- Do we have equal shares of our smoothie? How do you know?

Week 4 - Package 5 - Kindergarten Mathematics - Ten concentration

Things you need

Have these things available so your child can complete the tasks.

Ideal

- Playing cards (Ace to 10, plus jokers)

Why is this activity important?

This task is helpful for noticing patterns with number combinations. Being able to use number combinations that form ten allows students to use a range of efficient strategies when solving problems.

Before you start

Make sure you have the required resources ready.

What your child needs to know and do

Your child will need strategies for combining quantities up to 10.

What to do next

Instructions:

- Use ace to ten plus the jokers (which represent 0 in this case)
- Shuffle the cards and lay them out in a 4x4 array (grid), leaving the remaining cards in a central pile.
- Take it in turns to flip over two cards, looking for combinations that combine to 10.
    - If successful, students take the two cards. Replenish the two cards using the central pile.
    - If unsuccessful, students turn the cards face down again.
- Play until there are no cards left.

- The winner is the person with the most pairs.

Options for your child

Activity too hard?

Play with cards from Ace to 5, and the joker to represent 0. Look for pairs of numbers that combine to 5.

Activity too easy?

Change the target number to find combinations to 13, for example.

Use 3 or 4 cards to form the target numbers.

Follow-up questions to ask your child

- Were you surprised by all the different ways to make 10?
- What did you notice about the numbers that combine to ten?
- Let's record what we found out about ten! 10 is… (then, record combinations such as 6 and 4, 3 and 7, 8 and 2, etc.)

Extension/additional activity

Calculate scores by adding the value of each card, counting on by tens (using paired cards). The student with the highest score is declared the winner.